

REMARKS

Examiner Dang is thanked for his thorough examination of the Subject Patent Application. Regarding the rejection of Claims 1 - 12, 14 - 28, and 31 under 35 USC 112 the term “undoped” used in independent Claims 1 and 16, but not supported in the specification, has been deleted from all Claims featuring the erroneous “undoped” term. Therefore reconsideration of rejection of the above Claims under 35 USC 112, based on the amendments made, the removal of the term “undoped”, is requested.

Regarding the rejection of 1 - 6, 9 - 12, and 14, under 35 USC 103(a) as being unpatentable over Bai et al, in view of Despande et al, it should be noted that applicants amended Claim 1, clearly states that an amorphous silicon layer is deposited **directly** on an underlying conductive layer, **not on oxide layer** as is the case for the Bai et al prior art. Consequently applicant forms an amorphous silicon shape **directly on an underlying** conductive shape, in contrast to Bai et al wherein a silicon shape is formed on an oxide layer which in turn overlays a conductive shape, with the oxide shape remaining as a component of the Bai invention. The Bai art probably needed the oxide layer as a barrier to prevent consumption of the conductive layer during salicide formation wherein applicant’s unique process featured consumption of an amorphous silicon shape directly on an underlying conductive shape without the use of an insulator barrier layer, without risk to, or consumption of underlying conductive material. The Despande, Wu, and Wieczorek prior art only describe process details similar to applicants’s however no combination of the cited prior art can result in applicant’s unique process sequence

IME03-011C

in which an amorphous silicon shape, formed **directly** on an underlying conductive shape, can be totally consumed during salicide formation without the use of an intervening insulator layer.

Therefore reconsideration of Claim 1, and the referencing dependent Claims is requested. The same argument, formation of an amorphous silicon layer or shape, **directly** on an underlying conductive layer **without the use of underlying insulator barrier layer** as shown in the Bai prior art, is used to argue the rejection of Claims 16 - 21 and 24 - 28, under 35 USC 103 (a) as being unpatentable Bai taken with Despande, in further view of Wieczorek. Again the critical feature of forming amorphous material directly on conductive material without intervening insulator material, is only shown in applicant's process not in any of, or in a combination of, cited prior art. Therefore reconsideration of the rejection of independent Claim 16, and dependent Claims 17 - 28, and 31, referencing a unique independent Claim 16, is requested.

Regarding the rejection of independent Claims 1 and 16, under 35 USC 103(a), as being unpatentable over Chau et al (US 5,625,217 B1), in view of Nguyen et al (US 6,084,279), taken with Bai et al, Despande et al, in view of Wieczorek, again no combination features **an amorphous silicon shape formed directly on an underlying conductive shape, than totally consumed during salicide formation.** It is obvious the Chau prior art does not **totally consume** the amorphous layer overlying a conductive layer, therefore only forming metal silicide on an **unconsumed portion** of the amorphous silicon layer. Therefore the Chau prior art will not result in the low gate resistance and no polysilicon depletion obtained via applicants process in which all high resistance material is consumed during the silicidation procedure Therefore it is strongly


IME03-011C

believed that the Chau prior art in combination with the above referencing prior art, do not lead to a process sequence in which an amorphous silicon shape, formed directly on an underlying conductive shape, (precluding the use of a insulator barrier layer), is totally consumed during the formation of an metal silicide region directly on an underlying conductive shape. Therefore reconsideration of independent Claims 1 and 16, as well as all non-cancelled dependent referencing independent Claims 1 and 16 is requested.

Dependent Claims 13, and 29 - 30, have previously been cancelled.

Allowance of all Claims (1- 12, 14 - 28, 31) is requested.

It is requested that should Examiner Dang not find that the Claims are now Allowable that he call the undersigned attorney at 845-452-5863, to overcome any problems preventing allowance.

Respectfully submitted,  
  
Stephen B. Ackerman, Reg # 37,761